

READY IN 2025



Nedstack  
FUEL CELL TECHNOLOGY



# Heavy Duty Fuel Cell Power Module

For an emission-free future



The PemGen M is a hydrogen fuel cell system emitting only heat and water. Its compact design utilises heavy duty automotive components to provide robust and versatile operation. This innovation enhances efficiency and sustainability in stationary power generation.

## Performance

Prime Power BoL	112 kW
Prime Power EoL	100 kW
Nominal Power	100 kW
Minimum Power	32 kW
Net Efficiency at Nominal Power	50 %
Ramp Up Time	8 %/s
Start Up Time	< 10 s
Output Voltage	750 VDC
Current Range	400 A

## Environment

Air Supply	Ambient
Height (Altitude)	max 1500 m
Operating Temperature	-25 °C to 45 °C <sup>1</sup>
Storage Temperature	-25 °C to 85 °C <sup>2</sup>
Process Air	20-135 g/s

## Cooling

Maximum Heat Generation (EoL)	150 kW
Coolant Supply Temperature	3 °C to 65 °C
Maximum Return Temperature	77 °C

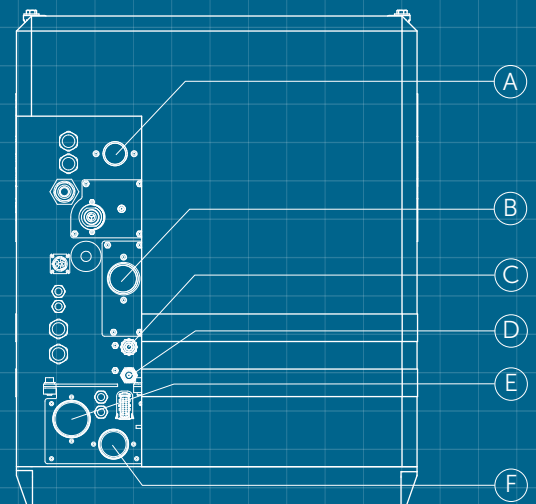
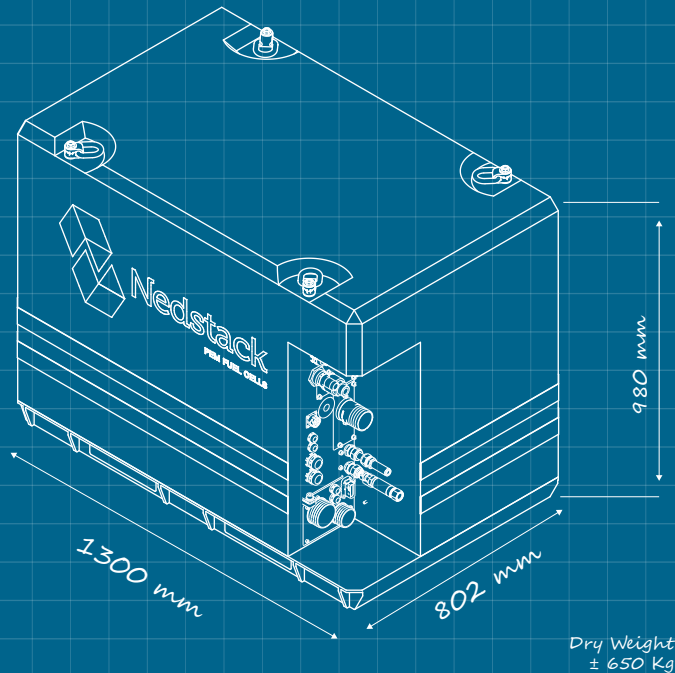
## H<sub>2</sub> Efficiency

	BoL	
	Net Power	Efficiency
100% load	100 kW	50 %
75% load	75 kW	53 %
50% load	50 kW	55 %

Inlet Pressure	11 - 19 barA
Hydrogen Standards <sup>3</sup>	Type 2, Grade D, 99,97 %

## Compliance/Certification

Standards	UNECE R10, R100, R134
Maritime Approval	On Request



- A = Coolant Out
- B = Coolant In
- C = Anode In
- D = Anode PRV Out
- E = Cathode In
- F = Cathode Out

1. Auxiliary supply required when shutdown  
 2. Decommissioned storage only  
 3. Contact Nedstack for other hydrogen purities